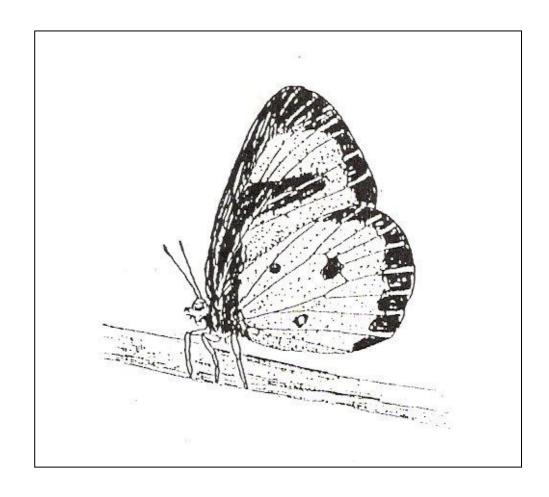


METAMORPHOSIS No. 24

Editor: N.K. Owen-Johnston



Editorial

A lot is spoken and written these days about conservation. I feel it is time that we cleared the air and worked out precisely what we are talking about.

Firstly, let's look at a few definitions. (These definitions are taken from Funk & Wagnell's Standard Desk Dictionary).

Conservation: The preservation of natural resources for economical or recreational use.

Ecology: The division of biology that treats the relations between organisms and their environment.

Management: The skillful use of means.

Population: A group of individuals.

Let's elaborate on these terms as they apply to butterflies. Ecology can be construed to be the study of butterflies and their relationship with their environment. A population of butterflies, in the ecological context, is a group of individuals of the same species that interacts with one another within the confines of the group. Management is the act of manipulating a population within its environmental boundaries to achieve a certain set of objectives. Or, to put it simply, it is applied ecology.

Wildlife managers cannot and do not manage butterflies or species. They manage populations. Several factors determine how this should be done. Firstly, the status of the population should be determined. It should be decided whether the population is safe, vulnerable or endangered. If the population is safe, the management required is nothing more than ensuring that no outside influence presents a threat to the population. If it is vulnerable, the threat to the population is identified and controlled or removed, thereby improving the population's chances of survival. If it is endangered, a study of the ecology will hopefully reveal what is causing the population to be threatened and appropriate steps can be taken to reverse the situation.

Whilst we would like to believe that the relevant authorities are practising applied ecology to all our individual butterfly populations, the hard fact is that they do not have the necessary manpower or resources to do this. It therefore becomes necessary for us, the amateur lepidopterists, to carry out the necessary field work and identify these threatened populations. Once these populations have been identified their status can be brought to the attention of the necessary authorities and appropriate steps can be taken to preserve them. This is what happened at Ruimsig in Roodepoort, where the endangered species *Aloeides dentatis* was studied by Messrs. Bill, Stephen and Graham Henning. They identified the threat to this unique butterfly and persuaded the Roodepoort authorities to create a nature reserve to protect this species. Our congratulations to them on this fine conservation effort.

From the above it will be clear that pressuring the authorities to pass laws that protect individual species is counterproductive, because these laws do not serve the purpose for which they are intended. They hinder the amateur lepidopterist in his studies and tend to make criminals of the very people who are trying to preserve the butterflies.

Before proposing that a particular butterfly be afforded legal protection, along with the penalties that inevitably will follow its illegal capture, it is necessary to ask ourselves whether our underlying motivation is the future well-being of the butterfly species, or the desire to possess a specimen that no one else may legally possess. If it is the former, then let us do the job properly, identify the threatened population and what is threatening it and take the necessary steps to protect the individual population. If it is the latter I suggest you take up stamp collecting – or some other such pursuit for, inevitably, you will be frustrated in your efforts.

Regional roundup

There have been very few reports of any activity from our members. I will highlight a few of the more interesting records reported in recent months. Several Transvaal members made the effort to travel to Zululand and several interesting records were made.

At a forest near Kosi Bay, several *Charaxes etisipe tavetensis* were recorded, along with a single female *Charaxes protoclea azota*. An effort was made to breed the latter but she died without laying any eggs. A post mortem revealed that she had laid all her eggs. Hopefully this means that we will have a reasonable change of recording this species again in the future. The anticipated hatch of *Deudorix dimomenes* failed to materialize and records of this species were extremely sparse this season.

During July, Steve Woodhall, Richard Stephen and Nolan Owen-Johnston visited the collecting locality near Thohoyandou in Venda. The object of the exercise was to try and establish whether or not *Platylesches tina* was still flying there. Whilst no specimens were recorded – the conditions were very dry and very few buttefrflies were recorded – several larvae were collected. Of these three pupated almost immediately. They subsequently emerged and were found to be *Platylesches tina*. So far as we know this is the first record of the early sages of this scarce skipper.

Whilst the editor apologises for the limited output of the regional roundup, we feel it fair to draw your attention to the fact that almost no reports have been received. Without your support it is almost impossible to compile a meaningful newsletter. Please pick up a pen and write us a letter about your experiences. DO IT NOW!

Lectures on Lepidoptera

Nolan Owen-Johnston

Recently Steve Woodhall gave two slide shows on Lepidoptera. The first was to the Botanical Society at the Witpoortjie Falls. He reports much interest at this presentation the theme of which was "Gardening with Butterflies" and was given in tandem with a talk on "Gardening with Birds" by Lionel Schroeder.

Butterfly gardening fits well with the trend towards planting indigenous plants. Steve pointed out that allowing larvae to munch some of the plants in a garden is a small price to pay for the spectacle of butterflies in one's garden. The larvae in themselves are an attraction for insectivorous birds.

Steve felt that the level of interest shown at this show bodes well for Andre Claassens' planned book on gardening with Lepidoptera.

The other slide show was presented to the East Rand Branch of the Wildlife Society. This one concentrated on 'gee whiz' pictures of our most strange and spectacular butterflies, and their life histories. Steve noted the still low level of awareness of butterfly ecology and took the opportunity to stress the role of habitat destruction in the growing scarcity of butterflies. He explained to the audience that they are wrong in thinking that collectors are a baleful influence on the decline of butterfly and moth species. On the contrary, the collector is often the only person who is aware of the threat to a colony of insects and is in a unique position to advise the authorities. Interestingly, few of the audience were aware of the obstacles often put in the way of the Lepidopterist by some of our Government Bodies.

P.S

Cover Story – Steve Woodhall reports the capture of a *O. p. penningtoni* in a forest in Northern Zululand during December 1989. It is gratifying to note the return of this extremely scarce lycaenid to our region.

Trip to Namaqualand

Steve Woodhall

It's amazing how a certain Professor Murphy is in charge of the Cape Province weather. He lies in wait until he detects lepidopterists driving towards his territory. He arranges for bright sun on the way down. He lulls you into a false sense of security with a bright sunny day. You find some butterflies and a feeling of optimism steals into your soul. Then he hits you with a cold front.

Mark Williams and I set off for Springbok on the 18th of August. When we got there we found a cold wind but headed for the Steinkopf area and hunted for the elusive *Lepidochrysops penningtoni*. It stayed elusive. A few *Chrysoritis chrysantas* were seen and we found *Cacyreus dicksoni* larvae on *Pelargonium crismophyllum*. Of course each *C. dicksoni* spotted caused a great surge of adrenalin because they look like a small dark *Lepidochrysops* on the wing. Our nerves were further frayed by the large numbers of *Gonatomyrina lara* that were on the wing.

Mark has a really excellent tent and we had the comfort of 50 mm thick polyurethane mattresses. It's a good job we also had good sleeping bags because that night the first cold front hit us. South Africa? This was more like the South Pole! The next day dawned (?) cold, wet and nasty. There was a queue of brass monkeys outside the Welders Shop in Springbok as we headed towards Port Nolloth and (faint) hopes of *Poecilmitis trimeni*. Unlike my last trip to Namaqualand, the clouds didn't lift as we approached the seaside. Needless to say, any Lepidoptera wisely had their heads well down!

On the next day we were pleased to see that the clouds had dispersed and a good day looked to be on the cards. We headed north of Steinkopf again amongst a very good flower display. Again no *L penningtoni* were seen but we had some success with *Melampias huebneri steniptera, Spindasis namaqua* and *Aloeides bamptoni*. We also went to the locality of *L. badhami* at Carolusberg to hunt for ants and larvae. We drew a blank with the larvae but found plenty of ants. After a fruitless search we went to the hill above the rubbish dump at Carolusberg to find *Aloeides barklyi* and *A. arida* in reasonable numbers. The *A. barklyi* were particularly impressive and reminded us of *Lepidochrysops glauca* on the wing.

Growing tired of elusive butterflies we went to Nababeep Poort where we found many larvae of the saturniid *Eochroa trimeni*. We also found some *Vegetia ducalis* larvae there, and at the *L. badhami* locality. A highlight was recording a new food plant for *V. ducalis*, which has still to be finally identified.

Tuesday the 22nd saw us heading for Witwater. The weather was clear and our mood optimistic. We first of all sought out *Lepidochrysops bacchus* near the river. We drew a blank but were rewarded by some large fresh *Poecilmitis lysander*. *M. huebneri steniptera* was very evident and after a while we climbed the mountain in search of *Lepidochrysops wykehami*. The climb produced some very large *Aloeides juana* and beautiful fresh *Tarsocera namaquana*, *M. huebneri steniptera* and in particular *Pseudonympha trimenii namaquensis*. When Mark reached the top his happy cries proclaimed the presence of a freshly emerged *L. wykehami*. However, his elation was short-lived as it became clear that only one was on the wing!

The highlight of the trip so far was found on the far side of the hill. The flowers had been quite impressive all along and a beautiful orange daisy was growing in clumps on flattish ground on the north side of the hill. All around these were flying freshly emerged specimens of both sexes of *Poecilmitis kaplani*. The daisy was the food plant and oviposition was observed. A colony of *Crematogaster* ants was found in the hollowed out stems of a dead daisy bush. Although these are likely to be the host ant there were no larvae or pupae of *P. kaplani* inside the nest.

The next day produced an enervating berg wind and we concentrated on trying to find *L. wykehami's* host ant. There being no females on the wing we could only guess at the identity of the food plant. A

small bushy *Selago* seems to be a good candidate. We excavated (gingerly!) a nest of *Camponotus fulvopilosus* (the ant found at the *L. badhami* spot at Carolusberg) but to no avail.

It has to said that the old barn at Witwater is one of the world's most beautiful campsites. In the late afternoon the berg wind died and we were treated to Namaqualand at her best. A calm, balmy evening, with the frogs singing in the reeds by the river.

The next day dawned beautifully clear and sunny but we felt we had exhausted the possibilities at Witwater. We struck camp and headed south for Niewoudtville. Possibly this piqued Prof. Murphy who had provided lovely weather at Witwater only to see us shove off! The weather got progressively nastier as we drove towards Vanrhynsdorp. We headed up Vanrhyns Pass with heavy hearts, into thick cloud. As if to prove its capriciousness the weather started to clear. We drove to the waterfall on the Louriesfontein road and were lucky to find freshly emerged *Chrysoritis coetzeri* in small numbers around the *Chrysanthemoides* bushes. *Poecilmitis psyche* was also on the wing and a female was seen to oviposit on the same *Chrysanthemoides* that *C. coetzeri* uses. We also recorded a few *Phasis clavum*.

As the nice weather seemed to be spreading we hot footed it to Neil Macgregor's farm where we met Neil and obtained his permission to search for *Lepidochrysops macgregori*. We saw two very fresh specimens one of which was netted and proved to be a female. We obviously were too early and saw no more. Again, there was a small *Selago*-type plant growing that could well be the food plant. Despite finding a small *Camponotus*-type ant and excavating the nest we drew a blank with the life history.

As we drove to the well-appointed campsite at Nieuwoudtville we could see that our friend the weather had only been playing with us and a really foul cold wind blew up. In the morning we had cold wet windy weather and I set out to town in a fruitless search for reading matter. As I headed further afield I spotted blue sky way over to the west. Quickly I collected Mark and we raced towards Lamberts Bay. There the weather was reasonable and we spent a pleasant afternoon 'Poecilmitising' among the sand dunes. We got one *P. pyroeis pyroeis* and some *Aloeides margaretae*. The confusing blue *Poecilmitis* were well on the wing and we brought back a reasonable series. *P. bamptoni* and *P. atlantica* were identifiable but the others are a real Pandora's box, only a few resembling *P. thysbe*. A diversion was made to the Leipoldtville road but *P. lycia* was not yet out. *Melampias huebneri huebneri*, however, was beginning to emerge.

Atop the pass the weather was still cold and windy and the next day was clear if somewhat cold. No *L. macgregori* were found at Glenlyon, only some *M. huebneri*. At least we did find quite a few *Vegetia* larvae on the *Eriocephalus* 'bossies'.

An admittedly optimistic sojourn to the Pass resulted in a total lack of *Lepidochrysops australis*. We had been obviously too early for the Namaqualand *Lepidochrysops*, except for *L. penningtoni* which remains an enigma. Is it perhaps a July insect? Only time will tell.

So, we bade farewell to Namaqualand, and to the game of trying to second-guess the Cape weather. I keep hoping that one spring I'll go to the Cape and have glorious unending sunny weather. This is probably a forlorn hope. Perhaps the uncertainty is what makes lepidopterising in the Cape so addictive!

Hill topping in the Magaliesberg by *Aphnaeus hutchinsonii* Trimen, 1887. Some observations

S.E. Woodhall.

On 26 October 1986 I climbed Horn's Nek at 11h00 to find abundant male *A. hutchinsonii*. I caught all these (some 25 in all) and kept them alive in bottles.

At 13h10 a perfect female *A. hutchinsonii* flew quickly up to the summit (the westernmost beacon above Horn's Nek to the east) approaching from the north. Needless to say she was netted quickly with thumping heart and shaking hands! To my chagrin no more females arrived during the next hour and I released my frustrated swains and left.

A week later the weather was bad and I did not visit Horn's Nek again until 4 October 1987 with Graham Henning. He climbed to the eastern beacon, I repeated my ascent of the western beacon with Hamish Henning.

Graham caught males but saw no females. I saw no males at all, but caught three females. All approached the summit from the north, between 13h15 and 13h35. One was so freshly emerged that she could hardly fly – she landed on the ground some 30 metres to the north of the summit and was hand-picked. Her wings were still soft. Not a single male was seen all day at that summit – perhaps somebody had caught all the males on the previous day (Saturday).

Two weeks later I was at the same place, catching males and keeping them alive. At 13h00 I had caught all the males and a female duly arrived from the north.

I released a nice fresh male who immediately flew to the top of the large Kaffir orange tree atop the summit. The female was perched on a Protea some 4 m southeast of the summit beacon. The male had not had time to settle properly before the female took off and approached him rapidly. He joined her in the air and they circled each other tightly and rapidly, rising some 5–6 m into the air above the summit, before shooting off rapidly to the north. I could not discern which was leading.

I wish I had marked that male because if he'd returned (no males did) I'd have had a useful extra bit of scientific information. At 13h20 another female approached and sat on the same Protea. I repeated the exercise and the same thing happened again.

In October 1988 I took Mark Williams to the spot and after catching all the males a female duly arrived which Mark caught and gave to Nolan Owen-Johnston. This specimen also came from the north.

These observations support the theory that the function of hill topping in low density Lepidoptera species is mate location.

I postulate that *A. hutchinsonii* is breeding on some as yet unrecorded food source on the northern slopes of the Magaliesberg at Horn's Nek. Every single female I have seen or caught has approached from the north. All except one (which was too freshly emerged to fly strongly) circled the hilltop once or twice in a broad (100 m diameter) circle with a flight noticeably more ponderous than that of the male before alighting on a bush that is not quite at the summit (when no males are present – I have not observed a female arrive when males were free at the summit). This food source probably occurs not far from the summit plateau – the evidence for this is that single ex-pupa female.

I had a theory that the food source would prove to be *Lannea discolor* or *Burkea africana* – from a conversation with C.B. Cottrell concerning the habits of Zimbabwean *Aphnaeus* species. Mark Williams and I have scoured the *Burkea* and *Lannea*-covered slopes in an unsuccessful search for larvae, ovipositing females or even *Crematogaster* ants usually associated with Aphnaeini, none of which has been found by us on any tree including *L. discolor* and *B. africana*.

Other theories I have heard have been that *hutchinsonii* feeds on *Acacia robusta* or *Loranthus* species. We have still to test the *Loranthus* theory, but at Horn's Nek *A. robusta* seems unlikely because none occurs either on the northern slopes of the Magaliesberg or in the forest at the base of the slopes. The nearest specimens are a good long way away near Malan Seun's nursery, which is a very long way for a female in ex-pupa condition to fly.

What is required is some rigorous field-work by someone living near Pretoria West to unlock the riddle of *Aphnaeus hutchinsonii*. Someday soon I am convinced we will find its nursery. My work has, I hope, helped bring this day closer. One thing I have achieved is to gather more evidence in favour of the sexual nature of hill topping.

Letter to the Editor

Steve Woodhall

Dear Sir,

With reference to my article on my Eastern Cape trip, I have a couple of corrections to make. Firstly, I was not the first to find *Anthene millari* in the Cape Province. J.C. McMaster recorded it at Fort Beaufort on 12/12/64. Secondly, the *Thestor* I recorded at Kammanassie and Avontuur was *T. murrayi*, not *T. montanus pictus*.

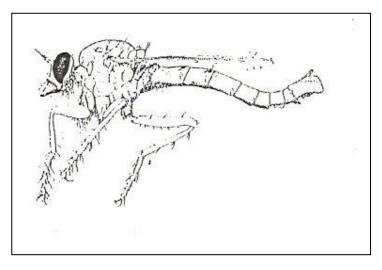
Butterfly prey of robber flies

Jason Londt

Natal Museum, Private Bag 9070, Pietermaritzburg, 3200

Robber Flies (Diptera:Asilidae) are a large and important group of predatory insects. They feed on a wide range of insect prey including butterflies and moths. Of the 665 prey records accumulated at the Natal Museum 36 belong to the Lepidoptera. Of these 20 are butterflies (the rest are moths). The majority of these records involve Pieridae (11). Other families include Lycaenidae (4), Satyridae (2), Danaidae (1), Hesperiidae (1) and Nymphalidae (1). The Pieridae have been identified as belonging to three genera – *Belenois* (6), *Colotis* (3) and *Eurema* (2). The Robber flies which are capable of capturing such prey belong to genera having fairly large species (between 2–5 cms in length) i.e. *Alcimus* (12), *Neolophonotus* (6), *Bactria* (1) and *Daspletis* (1). The South African localities from which specimens have been collected include Heidelberg and the Louis Trichardt district of the Transvaal, various places along the Natal Coast and a few widely spaced places in the drier northern Cape.

Members of the Society are asked to keep their eyes open for Robber Flies together with prey (of any kind). Specimens should be pinned together on the same pin (predator above the prey) or merely placed in an envelope together with full details of the collection and sent to me at the Natal Museum, Private 9070, Bag Pietermaritzburg 3200. Such specimens should be donated to the Museum as they will be required for future studies.



EDITOR

We have received the following article from Mr. E.L. Pringle. In view of the serious nature and extensive ramifications of the article we felt that an <u>expert's comment</u> was both essential and topical. The matter was discussed with Mr. R.G. Oberprieler at the National Insect Collection, Pretoria. His response is quoted fully below.

What's in a name?

E.L. Pringle

Readers often don't realize the weight of authority that goes behind the naming of an insect, and the legal niceties that can, in fact, lead to the discarding of an old and valued name. One such case has been the recent renaming of *Thestor obscurus* van Son by Koçak, a man who hails from Turkey. He, in his wisdom, chose to rename the insect *Thestor yildizae*, in honour of his wife. This move has, of course, resulted in a great deal of controversy, and so I have decided to place the whole matter under a microscope, in order to allow readers to assess the matter properly. Any conclusions which I draw are, of course, my own; I do not expect everyone to agree with them. I might add that this is not the first time that I am airing these views, since a lot of private correspondence has already taken place on the subject between myself, and the Head of the Lepidoptera Department of the British Museum.

To start with, the International Rules of Zoological Nomenclature stipulate that if any two or more species are described under the same name (i.e. are homonyms), the earlier description shall prevail, and the name will be unavailable to the later species. As far as species and subspecies are concerned, the Code then goes on to differentiate between primary homonyms (defined as "species-group names originally published in ...the same genus or collective group"), and secondary homonyms (defined as those names "later brought together in ...the same genus or collective group"). In the first case, a species name that was published after that name had already been allocated to another species of the same genus would fall away, and could never be revived. In the second case, the name could be revived, should the two species subsequently be allocated to separate genera once more. From the point of view of the Code, specific and sub specific names are given equal status, except when they are published simultaneously, in which case the species name takes preference over that of the subspecies. So, if a sub specific name is allocated to a particular butterfly in any new genus, it becomes unavailable for use in describing any subsequent species, subspecies, or form in that genus. Differences between names that are due solely to gender are disregarded by the Code: so caerule<u>us</u> and caerulea would be classified as homonyms. Intraspecific names, such as those of forms or aberrations, have no status at all in terms of the Rules, and so cannot compete in any way with the names of species or subspecies.

With some of these principles in mind, Koçak decided fairly recently to have a long and hard look at some of the world's nomenclature, to see if he could find any anomalies. He succeeded admirably in his quest, and, among the old names which he found was one of a European butterfly, originally described by Ruhl in 1893 as *Thestor nogelii* var. *obscura*. He then simply went ahead and purported to sink our own *Thestor obscurus* (described by Van Son in 1941), on the grounds that the last described insect had been allocated a name that was a primary homonym. At the same time, the insect was renamed *Thestor yildizae*, in honour of his wife.

The use of the word "var." (for "variety") in Ruhl's description results in certain difficulties in terms of the Code. According to Article 45 (e) the original status of any name of lower rank than species is determined as "sub specific, if the author when originally establishing the name, either clearly stated it to apply to a subspecies or, before 1961, did not clearly state its rank.." This, at first sight, would mean that *obscura* must be regarded as a subspecies of *nogelii* – and that the name would therefore compete with our *obscurus*. However, Article 45 (d) is qualified by Article 45 (e)(i) which states that: "Before 1961, the use either of the terms 'variety' or 'form is not to be interpreted as an express statement of either sub specific or infraspecific rank". (NOTE: In contradistinction to this, the Code states that if these terms are used after 1960, the name is to be regarded as being of infrasubspecific rank. (Article 45 (e)(ii)) reconciling Article 45 (e)(i) with Article 45 (d) is no easy matter, but taxonomists can assume that, as far as the use of the term "var", "variety", or "form" in descriptions published prior to 1961 is concerned, Article 45 (e)(i) is the operative provision. This means that the category in which such insects should be placed is left open, so that subsequent taxonomists can then classify the insect as they see fit. Were the insect then to be categorized as a form only, the name would not be able to compete with other species or subspecies in that genus; but were it to be

categorized as a subspecies, then obviously the name would be able to compete. In the case of this European insect, which is now known as *Tomares nogelii*, I understand that *obscura* is regarded as a form only.

If this is so, then the name *obscura* is clearly infraspecific, and cannot in any way compete with the specific name *obscurus*. However, I have not yet been able to verify the current status of *obscura* in relation to *nogelii*, and so cannot be definite on this point. If *obscura* is in fact, accepted as one of the subspecies of *nogelii*, then the name will be able to compete.

Be that as it may, there is another more important obstacle to the acceptance of *obscura* as a homonym of *obscurus*. This is the fact that, subsequent to Ruhl's description of *nogelii*, and prior to the description of *obscurus* by Van Son, the genus *Thestor* was revised, to exclude all insects other than the various Cape species which we know so well. This meant that, at the date upon which Van Son described *obscurus*, the European insect no longer belonged to the genus *Thestor*. Now, if we go back to the Code's definition of a primary homonym, this is given as "..species-group names <u>originally</u> published in ... the same genus or collective group .." (my emphasis). The problem, from Koçaks point of view, is that in 1941 when Van Son originally published his description of *obscurus* it was not in the same genus as the European insect. So, the names could not, by definition, have been homonymous at this time.

To permit any other interpretation of the Law of Homonymy in the Code would lead to far too much uncertainty in taxonomy, simply because it would allow any long-since abandoned name (such as the case in point) to compete indefinitely with all currently-used or future names. And there is no way that taxonomists can ever be in a position to trace with certainty all names that had in the past been allocated to very old – but subsequently revised – genera, such as the genus *Thestor* (which was first described in 1819!).

So let us not rush off to use Koçak's new name, bleating like a flock of sheep. Let us think a little about whether, in fact, the proposed new name is a valid one. I think you will have to agree with me that there are probably two very good grounds for excluding this name from our literature. Aside, that is, from the fact that it has been allocated by a man who has never seen the insect in its natural habitat, and someone who probably has no idea what the insect looks like – and this in preference to a name allocated by one of our greatest taxonomists. If you decide, as I have, to stay with Van Son's name, you can be assured that you are in good company, as I know that at least two of our leading taxonomists, Charles Dickson and David Swanepoel, think as I do.

D.A. Swanepoel takes a brief look at Koçak's exercise

Thestor obscurus van Son, 1941 Thestor yildizae Koçak, 1983

Of all the versions I had seen so far of the TURK'S – Koçak – meddling in the classification of the butterflies Dickson's presentation of the absurdity, especially with regards to *Thestor obscurus*, appeals to me most.

I quote Charles Dickson: "In reply to your query, I learnt, eventually that Koçak regarded as his chief form of amusement the 'faulting' on technical terms, in accordance with the "Int. rules" but sometimes on the most flimsy grounds, of names of butterflies selected by those who had described them in the past. It transpired that a mere form of the European Lycaenid *Tomares ballus*, had once been named *obscurus*, but with the incorrect use of the generic name *Thestor* entailed in the process. In spite of the latter error (which I would have thought ruled out any bearing on the Peninsula insect) the above man, in a cavalier manner, discarded Georges van Son's perfectly valid name and replaced it with his own objectionable concoction of a name. I naturally ignore his name myself. He is giving those of the butterfly dept. of the British Museum endless trouble through his doing the same thing with very many other names of butterflies which had been in continuous use up to the present time."

Kocak's exercise – to me – invites nothing but scorn and I should like to persuade aurelians of standing to refrain from pouring limelight on it. Naming the bug after his wife makes me wonder if she suffers from a deflated ego? Graham Henning says – "all very irritating! If he had named it georgesae or capensis it would not have been so bad."

TOO BAD is TOO BAD. Pay tribute to van Son who has done so VERY MUCH for the South African butterflies or become a champion of a Turk. The choice is ours dear reader!

Comment

Rolf G. Oberprieler

Having been asked to comment on a nomenclatorial matter that presently seems rather controversial among local butterfly enthusiasts and, to an extent, loaded with much emotion and sentiment, I hope that my opinion as an outsider, as it were, to the issue but as one who has to deal with such nomenclatorial problems virtually daily, will help to illuminate the matter in an objective way.

I would like to express appreciation to Ernest Pringle for carefully analysing the situation with reference to the International Code of Zoological Nomenclature – the only possible way to do this – and for submitting this to *Metamorphosis*; no doubt this exposure of the problem will elucidate the controversy and help other members to understand the situation.

In his analysis of the matter Ernest has very clearly crystallized out the two main pillars on which the case rests; the question of whether *obscura* Ruhl, 1893 should be regarded as a sub specific name or not, and if so, whether *obscurus* van Son, 1941 actually competes in homonymy with Ruhl's name which was at that time not in combination with *Thestor* anymore.

It is not really necessary for me to go into Ernest's argumentations in detail, for they are at the outset largely invalidated simply because they are based on the 2nd Edition of the International Code of Zoological Nomenclature of 1964, which is no longer in use but has been replaced by the 3rd Edition of 1985 – and this new edition happens to affect both the issues here at stake. And to argue that this edition was not yet published at the time of Koçak's 1983 paper in which he replaced *obscurus* van Son with *yildizae* does not alter the fact that the situation can now only be examined with reference to the latest edition of the Code. Under this edition, Ernest's two arguments look like this:

1) whether *obscura* Ruhl should be regarded as a sub specific or an infraspecific name (the latter, as Ernest quite correctly states, being explicitly excluded from the provisions of the Code).

Article 45(g) reads: **Interpretation of the terms "variety" and "form"** – A new name published expressly for a "variety" or a "form" may be either a sub specific or infraspecific name: its rank is:

- i) infraspecific if published after 1960.
- ii) sub specific if published before 1961:
 - (1) however, if the content of the work reveals that infraspecific rank is meant, the name is infraspecific unless, prior to 1985, it has been treated as an available name and either adopted as the name of a species or subspecies or treated as a senior homonym, in which cases the name is deemed to be sub specific from the date of its establishment.

With regard to *Thestor nogelii* var. *obscura* Ruhl this means that *obscura* must be regarded as <u>sub specific unless</u> Ruhl in his original description somehow stated that *obscura* denotes only a colour or other variation (but not a geographic or ecological form), and even then <u>only</u> if the name was <u>never</u> subsequently treated as an available name (species, subspecies, homonym) by someone else. Since I have neither Ruhl's original description before me (I am trying to obtain it – has any reader perhaps a

copy available?) nor am I familiar with the literature on the genera in question, I can't, for the moment, categorically state that *obscura* Ruhl is either sub specific or infraspecific in rank. This matter should, however, be relatively easy to settle by reference to the original description and to the *Lepidopterorum Catalogus* and later literature; I must emphasize, though, that if Ruhl did not qualify his "var." in any way, it is to be treated as a subspecies according to this article of the Code.

2) whether obscurus van Son, 1941 is to be regarded as a homonym of obscura Ruhl, 1893 as the latter was not in *Thestor* by 1941 any more.

Article 53 (c) reads: **Homonyms in the species-group**. Two or more available species-group names having the same spelling are homonyms if they were originally established in combination with the same generic name (primary homonymy), or if they were subsequently published in combination with the same generic name (secondary homonymy).

Article 57 (b) reiterates: **Primary homonyms**. Identical species-group names [Art. 53c (i)] established for different nominal taxa and originally combined with the same generic name are primary homonyms [Art. 53c], and the junior is invalid.

Articles 53c (i) and (ii) deal with variant spellings that are deemed identical for the purposes of homonymy, and differences in termination due to gender (-us, -a, -um etc.) are regarded as identical spellings, apart from the fact that Ruhl's *obscura* must be corrected to *obscuras* anyway when in combination with a masculine generic name such as *Thestor*. Both the quoted articles clearly stipulate generic name and not genus, which means that the combination with the generic name *Thestor* makes them primary homonyms, no matter into which genus any of the two names may have been shifted later. The justification of this ruling becomes apparent when one considers that the separation of *Thestor* and *Tomares* is a purely subjective matter that may have to be rejected by further study (e.g. cladistic analysis), thus reuniting both names in the same genus again.

On the issue of homonymy then, the situation is quite clear: *obscura* Ruhl and *obscurus* van Son are primary homonyms (with the junior one being <u>permanently</u> invalid, Art. 52(b) as long as both are regarded as available names. Only if *obscura* Ruhl is, for some reason (e.g. being infrasubspecific), regarded as unavailable does homonymy between them not occur.

Analysing the whole matter then, I can temporarily only assume that Koçak did ascertain (as he should have done in such a case) that *obscura* Ruhl is, in fact, of sub specific rank, and conclude that *obscurus* van Son is a junior primary homonym that has to be permanently replaced by its next oldest synonym, or a new name (replacement name) if no such synonym exists. So, pending verification of the rank of *obscurus* Ruhl, it appears as if Koçak was justified in renaming *obscurus* van Son as *yildizae*.

Two other matters also deserve an address in this context, namely the comparison with similar cases, and the acceptance of such a new name.

Regarding the first question, I am specifically referring to Opinion 1478 of the Commission on Zoological Nomenclature, published in the *Bulletin of Zoological Nomenclature* 45(1):78 of 1988, where, in a case very similar to ours here, the Commission ruled that the older name *Lycaena mirza* Staudinger, 1847 was to be rejected in favour of its junior primary homonym *Lycaena mirza* Plötz 1880, and Koçak's replacement name *mirzaellus* for *mirza* Plötz was consequently invalidated as a junior objective synonym of *mirza* Plötz. I must admit that I find the ruling of the Commission in this case rather surprising, as it usually busies itself with cases that are dubious under the present articles of the Code, or require an additional criterion such as nomenclatorial stability to be taken into account, but not with cases that can unambiguously be solved by reference to the existing provisions of the Code. Since *mirza* Plötz is clearly a junior primary homonym and apparently not of any particular importance, this case could have been settled simply by invoking the clauses dealing with homonymy and priority (as pointed out by the three objectors to the ruling), and Koçak no doubt acted squarely within these clauses when replacing *mirza* Plötz with *mirzaellus*. But be that as it may, we cannot infer

from such a case that a similar ruling will or should be adopted in the case of *Thestor obscurus*. The Code itself is explicit on this in point (8) of its introduction:

There is no "case law" in zoological nomenclature. Problems in nomenclature are decided through the application of the Code, and never by reference to precedent. If the Commission is called on to render an Opinion or Direction in a particular case, the decision relates to that case alone.

Therefore, a comparable situation existing in one or more similar cases is of no consequence and irrelevant to the particular matter we are discussing.

Under the assumption that *obscura* Ruhl is sub specific and that Koçak was therefore justified in replacing it with a new name, the question now remains whether one is obliged to follow this replacement or not. I think the only national and scientifically justifiable stance to adopt here is the same that applies to all other nomenclatorial and taxonomic changes: if you can't prove the opposite, you are obliged to accept the latest treatment. If we don't accept this as a baseline premise, what's the point of anybody synonymizing genera and species or establishing new ones? We would still be debating whether the break-up of *Phalaena* or *Lycaena* is justified or not. A case in point here is perhaps another one that greatly affected students of local butterflies: the transfer of the African species of *Papilio* to *Princeps* by Hancock in 1983. If we can't refute Hancock's evidence and/or argumentation, we are obliged to accept his results, whether we like them or not. Only if we have additional evidence, alternative methods of analysis etc. and can demonstrate in a published form that Hancock's conclusion is not necessarily the only one possible, as James Miller has done in his 1987 phylogenetic studies on the *Papilionidae*, only then are we justified not to follow either Hancock or Miller, but whoever one we follow, we have to motivate this choice by stating reasons, only then is it a scientifically acceptable and justifiable choice.

This reasoning should also apply to the case of *Thestor obscurus*. If we can't substantiate that Koçak was wrong in replacing obscurus van Son, we are obliged to accept his new name as it was published properly and is therefore valid. And if we have clear evidence that obscura Ruhl is of infrasubspecific status only and therefore not eligible as a homonym of obscurus van Son, then we have to publish that information and, better still, submit the case to the Commission for an opinion. But until such information is found, we have to accept Koçak's new name. It is not, to come back to Ernest's analogy, a case of bleating like a flock of sheep, unless the acceptance of every nomenclatorial and taxonomic change, every synonymy and every generic transfer, every establishment of a new taxon qualifies for that label as well. It is a case of common scientific sense; otherwise we would also have to disregard e.g. Einstein's theory of relativity simply because we can't prove it ourselves or argue that someday someone will disprove it. The mere fact that insect names change is an indication that the science of insect systematics is alive and progressing, that we are amassing new information and reaching new insights, and if we categorically ignore such advances, we are killing all proposed changes at face value only - accept the analogy of the flock of sheep here; but if our critical examination of the case reveals that we do not possess any evidence refuting that conclusion, then we have to accept it.

In conclusion, we must now ascertain whether *obscura* Ruhl really is to be regarded as of sub specific rank, by checking the original description and all subsequent literature. If so, Koçak's replacement name is certainly justified, and we can only appeal to the Commission to have it repealed if we think this is merited. If not, if it is of infrasubspecific rank, then *yildizae* is invalid and such a state of affairs must be published and submitted to the Commission. But <u>only if we have such evidence</u> are we justified to carry on using *obscurus* van Son, of course clearly stating this evidence and that the case has been referred to the Commission. And finally, it is a futile exercise to draw in various sentiments and emotions, as I've heard, that Koçak is not familiar with our *Thestor* here, that he renamed it after his wife or whoever, that it is a name given by a man of van Son's stature that sinks, that so-and-so feels the same way – these may all be deserving of sympathy but unfortunately have no bearing on the case. After all, what <u>is</u> in a name? Is it a cherished, sacrosanct epitaph beyond reproach, or is it supposed to be a clear label enabling us to refer to any particular insect in an unambiguous way?

Rolf G. Oberprieler National Collection of Insects Plant Protection Research Institute Private Bag X 134 0001 PRETORIA

Letter to the Editor

Rudi Mijburgh

Rudi Mijburgh van Pretora het ook aan die Redaksie kommentaar gelewer:

Mr. Rudi Mijburgh feels concerned that an article appearing in *Rapport "Skoenlappers wat soos miere leef"*, lacks accuracy and finesse. (*Rapport*, 3 September 1989: p. 25). He appeals to potential writers of articles prepared in Afrikaans to submit these to himself for final vetting prior to publication for general distribution.

Letter to the Editor

D.A Swanepoel

Mr. D.A. Swanepoel writes from Duiwelskloof, highlighting further disquieting events occurring in the Lowveld: He wishes to place on record the following:

Holocaust struck Malta Forest

On the 26^{th} September, I was asked to accompany a television team to Malta to see the damage to the forest and voice my dismay at what the road builders had done there. The road through the bush is being tarred. However, watch out for our opposition action to the tarring on SABC TV 50/50 programme.

He has prepared an appropriate article for *Metamorphosis*, which is printed below.

Holocaust struck Malta Forest

D.A. Swanepoel

No longer will aurelian visitors to the butterfly paradise of the Republic of South Africa be able to see butterflies flit across the road of the forest as during the days of yore. Now the abominable tar road that traverses the forest has put paid to their pleasures. No longer will collectors be able to experience the joy of putting their nets over butterflies sipping moisture around pools of water on the road. At one point swarms of *Papilio nireus lyaeus* settled so densely around a pool that one could hardly see the ground. When disturbed they flew up forming a black cloud in which steaks of brilliant green reflect the sunlight; causing a most enthralling spectacle.

During an exceedingly dry year a large crab that had been flattened on the road by the wheels of a lorry, attracted no less than six *Papilio ophidicephalus* who became so engrossed in their efforts to get some sort of food from the exuding juices of the crab, that they were handpicked off the crab. No sooner had they been removed than others turned up to take their places.

Way back in the forties many small steams from the mountain side crossed the road to which myriads of butterflies – small blues, whites, Papilios and Karakses – came to quench their thirst on the mud along the streams. One such stream almost unfailingly attracted beautiful specimens of *Pseudacraea*

boisduvalii trimenii. In the mornings they usually float over the treetops from where they may be looking down, like birds of prey, to the road below and when detecting the muddy outskirts of a stream down they would come, thus facilitating the collectors efforts to acquire specimens of this gorgeous butterfly. Will the tar road ever attract them? Gone forever is this joyful bonanza which was one of the highlights of the forest.

Salamis parhassus – Early one morning I was wondering what could cause the large leaves of an 18 inch plant to droop so much. When I disturbed the plant twenty or more parhassus flew out from under the leaves – what a sight! Watching the butterflies come to roost under the leaves of a low tree one afternoon, I decided to put the tree under torch light the evening. What an astonishing sight met my eyes. One could hardly count all the butterflies holding on to the leaves on their undersides. Perhaps the best show this butterfly ever staged – for me – in the forest was in January 1957 when a small cloud consisting of a dozen or more flew up and down the road for hours on end causing one to wonder if they were exercising for a possible migration.

Nepheronia thalassina – A very common species in the Malta and it is hoped it will continue to adorn the forest with its attractive light blue wings. There were years that its female with yellow hind wings were almost as plentiful as the male. April 1954 saw numerous females of a white I had never seen there before, swarming about the forest. They were pursued by males of [Appias] epaphia, but were the pursuers epaphia males? Much to the surprise of Georges van Son and myself, when we subsequently examined them they were all [Appias] sabina males. This butterfly had never been seen before in the Republic. Looking through my specimens of epaphia I discovered I had taken a male sabina in the Malta as long ago as 1943. Nineteen fifty-four was its picnic year as very few specimens had been taken there since.

As autumn approached each year *Pseudacraea lucretia tarquinia* starts making its appearance in larger numbers than in summer. What a sight to see females with amazing shades of white, yellow and orange adorn the road. Also displaying alluring colours of their wings females of [*Cymothoe*] alcimeda mingled with them. The soil of the road was the main attraction from which one and all endeavoured to get something to drink.

During one of their picnic years the far northern skipper *Andronymus neander*, dubbed the nomad dart, came swarming all over the Malta forest. It is not a butterfly regularly encountered in the forest. One year *Zezonia zeno* was seen in numbers too in July.

Deudorix dariaves – Up to the time I had first come across this butterfly in the Malta it had been known to occur only in the Zululand forests. *D. dariaves* is not nearly as plentiful in Malta as in Zululand. Walking around the road during early mornings one sometimes sees a whitish looking butterfly sitting on the leaves of low bushes as if sunning itself. Later, when warm enough, it takes to the tree tops where it frolics about until about 2 p.m. In the Zululand forests specimens regularly, when warm and sunny, descend to fly about under trees. There Pennington once saw numerous specimens play about in the dying rays of the setting sun.

The Karakses – Before collectors came with all their trap nets species of *Charaxes* were readily seen about the forest and on the road sipping at muddy places. A youngster one day came to me excitedly showing me ten of the best, *varanes*, *candiope*, *brutus*, *xiphares* and what not he had handpicked off a small piece of monkey dung on the road. Will monkeys now visit the tar road? Hemmed in by the steep slopes of the Wolkberg, Malta is a very small forest – perhaps one kilometer long. After the trap nets arrived it became evident that the various species had decreased considerably – perhaps trapping had a detrimental effect upon their numbers?

Not so very long ago butterflies festooned the riparian vegetation of the forest. Butterflies on the leaves, on the flowers, on the road and everywhere. They had come as if they had been summoned by heavenly chimes. One wonders if this incredible spectacle would ever be repeated again and who

would be fortunate enough to witness it in the future. There are not many kinds of butterflies there but there are many of a kind.

I am not against the improvement of roads but it saddens me to see how man in his headlong rush to facilitate things for himself lost regard for the rights of the lesser creatures of the Great Creator. Again, I would like to quote Aloyius Horn – "When man has destroyed nature it is his turn to go, the barren earth will swallow him up". There is hardly a place in South Africa that can match the butterfly glories of the Malta forest. Good old Malta forest we will one day say. It has now been dubbed Legalametse.

Letter to the Editor

Bill Henning

"Dear Nolan,

I have had another letter from Colin Walmsley. Here are some of the 'interesting' comments to put in your next *Metamorphosis*. He paid a visit to St. Lucia in the last week of March 1988 and caught *H. daedalus* f. *melaegris* which was settling frequently on a patch of dry sand. "I observed, large numbers of *A. ochlea* near our campsite and on taking a drive to Dukuduku, I noticed another large colony." Other specimens that day were *Pentila tropicalis*, *Phalanta aethiopica*, *Neptis goochi* & *Borbo lugens*.

There is also a large number of P. d. cenea about – I noticed a similar large number of this butterfly in Feb. 1987 when I was there. In Feb. '87 Dixeia spilleri were swarming at Dukuduku, but this time I did not observe any! I took 2 larvae from a Dovyalus sp. tree which pupated shortly afterwards $(2^{nd}/4^{th})$. These pupae hatched $8^{th}/4^{th}$ and were Phalanta aethiopica, although the markings are more pronounced and the upper side is an ochreous-brown fading into a mustard colour on the inside of the wings. I was, and still am, confused as to whether these are eurytis or not, and how one could effectively tell the difference! Can you help?